

REMARKS/ARGUMENTS

Claims 1-12, 14-18 and 21-25 remain in the application. Claims 13, 19 and 20 were previously cancelled. Claims 6, 21-22 and 25 are currently amended. As a result of the amendments claim 25 now depends from rejected claim 22. Review and reconsideration on the merits are requested.

Claim Amendments

The Examiner has objected to claims 21 and 23-25 but has further indicated that these claims would be allowable if rewritten in independent form. As first presented in the Amendment filed July 14, 2003, claims 23-25 depended from claim 21.

Claim 21 defines an embodiment of the invention in which the valve moves with the arm relative to the chamber while the chamber remains stationary. By contrast, the cited combination of U.S. Patent No. 5,924,947 to Williams and U.S. Patent No. 4,607,662 to Hama et al. teaches only an embodiment in which the chamber moves with the arm relative to the valve. Based on at least this distinction, claim 21 is patentable over the cited combination.

Although the applicant strenuously disagrees with the Examiner's rejection of independent claim 1, from which claim 21 depended prior to amendment, in the interest of furthering the progress of the application applicant has amended claim 21 by rewriting it in independent form.

Additionally, applicant has deleted a limitation from claim 21 that could have caused confusion. Prior to amendment, claim 21 specified that the "chamber is formed in *a portion of the drum section which remains stationary.*" However, the "drum section" is part of the arm, which moves. Accordingly, claim 21 has been amended to specify only that the chamber is stationary, not that a portion of the drum section is stationary. Applicant does not believe that the deletion of this limitation has in any way narrowed the scope of the claim.

Claim 6, which is also directed an embodiment in which the valve moves with the arm relative to the chamber, has been amended so as to be written in independent form and is patentable for at least the same reason as stated above with respect to claim 21. Additionally, claim 6 has further been amended to clarify a possible ambiguity. Because the valve of claim 6

is coupled to the drum section of the arm, which moves, the statement in claim 6 that the “chamber moves with respect to the valve” has been replaced with the statement that the “valve ... moves with respect to the chamber.” Since the amended language is the equivalent of the original language, when speaking in relative terms, applicant does not believe that the amendment alters the scope of the claim in any way. Nevertheless, applicant does believe that the amendment is an aid to understanding.

Claim 22 is directed to an embodiment in which the chamber moves with the arm relative to the valve. In accordance with the previous amendments and in recognition that the drum section of the arm moves, claim 22 has been amended to clarify that the valve is operably mounted on the stationary support member rather than the drum section of the arm. Accordingly, the arm and associated chamber can move relative to the valve. Applicant has also made an editorial amendment to claim 22.

Claim 25 is also directed to an embodiment in which the chamber moves with the arm relative to the valve. However, as originally presented, claim 25 depended from claim 21, which is directed to the embodiment in which the valve moves with the arm relative to the chamber. To correct this incongruity claim 25 has been amended to depend directly from claim 22. In addition, the intervening limitation of claim 23, from which claim 25 originally depended, has also been incorporated.

Claim Rejections

The Examiner has rejected claims 1-12, 14-18 and 22 under 35 U.S.C. §103 as being obvious over U.S. Patent No. 5,924,947 to Williams in view of U.S. Patent No. 4,607,662 to Hama et al. Applicant respectfully traverses these rejections for the following reasons.

The Examiner suggest that it would be obvious to modify Williams to replace the ball valve mechanism used in that tensioner with the valve plate that is used in accordance with the present invention based upon the teachings of Hama et al. However, “to establish obviousness based on a combination of the elements disclosed in the prior art, there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the applicant.” *In re Kotzab*, 208 F.3d 1365, 1370, 54 U.S.P.Q.2d 1308, 1316 (Fed. Cir. 2000).

In fact, “[o]ur case law makes clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references.” *In re Dembiczak*, 175 F.3d 994, 999 (Fed. Cir. 1999).

According to the Examiner, the teachings of Hama et al. provide the motivation to combine the cited references. Specifically, the Examiner points out that “Hama et al. discloses a valve pivotally (20) attached to the inner section of a fluid chamber in order to allow smooth changeover operation and to lower the resistance against the flow path change over operation.” Applicant respectfully submits that the teachings of Hama et al. are far narrower than suggested by the Examiner and would not motivate a person of ordinary skill in the art to modify Williams as proposed.

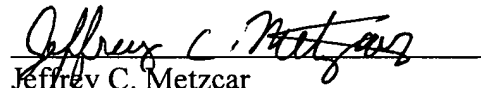
According to the teachings of Hama et al., conventional 3-way change-over valves are divided into two types: spool-type and sphere-type. (Col. 1, ln. 8-21). In the first type, a spool having openings for flow-path change-over is provided and inserted into a cylinder. Flow-path change-over is effected by *sliding* the spool in the cylinder. In the second type, a spherical valve having openings for flow-path change-over is provided and change-over is effected by *rotating* the spherical valve. The disadvantage of the conventional 3-way change-over valves, according to Hama et al., is that they employ *sliding surfaces with openings for flow-path change-over* that are often involved in contamination with foreign matter. Accordingly, the resistance against the sliding operation may be too high for smooth change-over.

To overcome the disadvantages of conventional 3-way change-over valves, Hama et al. teaches the use of a pivoting valve to eliminate the use of sliding surfaces, which may become contaminated. More specifically, Hama et al. eliminates sliding of the valve surfaces that have openings for flow-path change-over. Accordingly, Hama et al. teaches the advantages of a pivoting valve over the conventional spool-type and sphere-type 3-way change-over valves. Hama et al. does not teach generally that pivoting valves should be used over all other valves if smoother operation is desired.

Williams teaches a hydraulically damped tensioner having a ball valve that seats and unseats against a valve plate. The ball valve taught by Williams is not a 3-way valve and there is no indication that the ball valve utilizes sliding surfaces like the conventional 3-way valves discussed by Hama et al. In particular, there are no surfaces in the Williams' ball valve that have openings for flow-path change-over that are also sliding. Accordingly, the narrow teachings of Hama et al. are not applicable to teachings of Williams and a person of ordinary skill in the relevant art would not be motivated to modify the teachings of Williams in accordance with the rejection.

In light of the foregoing, the claimed subject matter is patentably distinct from the cited prior art and applicant respectfully requests that a timely Notice of Allowance be issued in this case. The Commissioner is hereby authorized to charge any additional fees which may be required by this paper, or to credit any overpayment to Deposit Account 20-0809. Prompt and favorable examination is requested.

Respectfully submitted,


Jeffrey C. Metzcar
Reg. No. 52,027

THOMPSON HINE LLP
2000 Courthouse Plaza, N.E.
10 West Second Street
Dayton, Ohio 45402-1758
(937) 443-6841